

Supplementary Online Content

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eTable 1. Prenatal ultrasound exposure in children with autism spectrum disorder (ASD) compared to controls with developmental delay (DD) and typical development (TD), unadjusted

eTable 2. Prenatal ultrasound exposure by trimester in children with autism spectrum disorder (ASD) compared to controls with developmental delay (DD) and typical development (TD), unadjusted

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1: Prenatal ultrasound exposure in children with autism spectrum disorder (ASD) compared to controls with developmental delay (DD) and typical development (TD), unadjusted

	ASD (N=107)	DD (N=104)	TD (N=209)
Total # ultrasound scans (n), mean (95% CI)	5.8 (5.1-6.4)	5.9 (5.2-6.6)	6.0 (5.5-6.6)
Total time of ultrasound exposure (seconds), mean (95% CI)	3015.4 (2714.5-3316.3)	3236.4 (2931.0-3541.9)	3397.5 (3164.6-3630.5)
Depth of ultrasound (cm), mean (95% CI)	13.4 (13.1-13.8)	13.5 (13.1-13.8)	12.9 (12.7-13.1)
Frame rate of ultrasound (Hz), mean (95% CI)	39.6 (38.1-41.1)	40.0 (38.4-41.6)	41.1 (40.0-42.2)
Mechanical Index (MI) (no units), mean (95% CI)	1.09 (1.08-1.10)	1.09 (1.08-1.10)	1.08 (1.07-1.09)
Thermal Index (TI) (no units), mean (95% CI)	0.20 (0.19-0.21)	0.20 (0.19-0.21)	0.19 (0.18-0.20)
Doppler exposure (sec), mean (95% CI)	169.0 (137.8-200.3)	214.6 (174.9-254.2)	184.1 (155.9-212.2)
3D-Imaging exposure (sec), mean (95% CI)	71.4 (52.0-90.8)	67.5 (49.6-85.4)	84.8 (70.5-99.1)
4D-Imaging exposure (sec), mean (95% CI)	150.4 (115.8-185.0)	121.9 (92.8-151.0)	149.1 (122.2-176.1)

eTable 2: Prenatal ultrasound exposure by trimester in children with autism spectrum disorder (ASD) compared to controls with developmental delay (DD) and typical development (TD), unadjusted

First Trimester			
Characteristic	ASD (N=107)	DD (N=104)	TD (N=209)
Total # ultrasound scans (n), mean (95% CI)	0.4 (0.3-0.5)	0.5 (0.4-0.6)	0.6 (0.5-0.7)
Total time of ultrasound exposure (seconds), mean (95% CI)	256.0 (192.4-319.7)	250.4 (191.0-309.7)	384.8 (328.6-441.0)
Depth of ultrasound (cm), mean (95% CI)	12.3 (12.0-12.7)	11.5 (11.2-11.7)	11.5 (11.2-11.7)
Frame rate of ultrasound (Hz), mean (95% CI)	45.6 (42.8-48.4)	48.3 (44.8-51.8)	41.8 (39.8-43.8)
Doppler exposure (sec), mean (95% CI)	9.4 (3.0-15.7)	5.2 (2.4-7.9)	8.4 (5.3-11.4)
3D-Imaging exposure (sec), mean (95% CI)	8.7 (3.4-14.0)	9.3 (4.8-13.7)	11.5 (7.7-15.3)
4D-Imaging exposure (sec), mean (95% CI)	5.7 (1.3-10.1)	0.5 (-0.2-1.3)	12.1 (7.6-16.6)
Second Trimester			
Characteristic	ASD (N=107)	DD (N=104)	TD (N=209)
Total # ultrasound scans (n), mean (95% CI)	1.8 (1.6-2.0)	1.9 (1.7-2.1)	1.9 (1.8-2.1)
Total time of ultrasound exposure (seconds), mean (95% CI)	1600.4 (1413.5-1787.3)	1817.6 (1635.3-1999.9)	1953.5 (1823.5-2083.5)
Depth of ultrasound (cm), mean (95% CI)	13.0 (12.6-13.3)	12.8 (12.4-13.1)	12.4 (12.2-12.7)
Frame rate of ultrasound (Hz), mean (95% CI)	44.1 (42.4-45.7)	43.4 (41.6-45.2)	45.6 (44.4-46.9)
Doppler exposure (sec), mean (95% CI)	54.2 (42.6-65.8)	68.9 (56.5-81.3)	66.4 (57.2-75.5)
3D-Imaging exposure (sec), mean (95% CI)	37.8 (24.5-51.0)	40.6 (26.5-54.7)	46.0 (36.5-55.5)
4D-Imaging exposure (sec), mean (95% CI)	71.0 (54.3-87.7)	65.3 (48.2-82.5)	76.8 (63.5-90.1)
Third Trimester			
Characteristic	ASD (N=107)	DD (N=104)	TD (N=209)
Total # ultrasound scans (n), mean (95% CI)	3.4 (2.9-3.9)	3.4 (2.8-3.9)	3.3 (2.9-3.8)
Total time of ultrasound exposure (seconds), mean (95% CI)	1155.1 (982.3-1327.8)	1168.5 (995.7-1341.2)	1069.8 (944.1-1195.5)
Depth of ultrasound (cm), mean (95% CI)	14.9 (14.6-15.3)	15.3 (15.0-15.6)	14.7 (14.5-14.9)

Characteristic	ASD (N=107)	DD (N=104)	TD (N=209)
Frame rate of ultrasound (Hz), mean (95% CI)	29.5 (28.1-30.9)	30.4 (29.2-31.6)	29.3 (28.3-30.2)
Doppler exposure (sec), mean (95% CI)	91.7 (70.3-113.1)	111.8 (85.5-138.1)	96.8 (77.1-116.4)
3D-Imaging exposure (sec), mean (95% CI)	25.0 (15.1-34.9)	17.6 (9.0-26.2)	27.6 (20.3-34.9)
4D-Imaging exposure (sec), mean (95% CI)	73.7 (47.9-99.6)	58.5 (40.7-76.2)	62.4 (45.2-79.5)